laboratory-based tests but again it is a criticism of the published data not the book. It was good to see an attempt to examine effects on a wide range of pest and disease problems even if the effect was not strong or convincing. The main part of the biological activity section (205 pages) is a review of mites and insects and the effects of neem and neem extracts or products on them. This to me was worth the price of the book alone and, once again, the comprehensive references ensured that any type of activity could be followed up.

I often argue that the fight against phytophagous and disease-carrying insects is such an important one that we should use all the weapons available to us to ensure success. It is important that we respect the advances made by others in the field and work together to improve our successes. It is of no help to anyone to argue a case by denegrating the achievements of others. Unfortunately, all too often in this book the statement occurs that the use of toxic and environmentally damaging synthetic chemicals is a practice that has to be stopped. Why not say that the integration of careful chemical usage and natural systems will give us the answers we are seeking? Surely this is integrated crop management. But if you can overlook these things and you want to know all that there is to know about the neem tree—buy this book.

L. G. Copping

Biotransformations, Volume 7: A survey of the biotransformations of drugs and chemicals in animals, ed. D. R. Hawkins, The Royal Society of Chemistry, Cambridge, 1996, xxxii + 486 pp., price UK £139.50.
ISBN 0-85404-403-5

This latest volume in the 'Biotransformations' series contains material on the metabolism of chemicals in vertebrates (or in-vitro tissue preparations therefrom) selected from publications appearing in 1993–1994. Cumulative compound, key functional group and reaction type indexes are provided, to facilitate access to all of the information in volumes 1 to 7. The book is organised so that the information can be presented on CD-ROM as 'Metabolism Database' (Synopsis Scientific Systems Ltd, 1997).

The overall aim of the series is to provide an easy method for accessing information on the known pathways for the biotransformation of structurally related compounds, including pharmaceuticals, agrochemicals, food additives, environmental and industrial chemicals.

The chemical structures of key functional groups and entire molecular types are listed at the beginning of the book (pp. ix–xxxii). Following this listing is an overview chapter on highlights from the body of the volume, e.g. novel biotransformations, stereoselective processes, and mechanisms of toxicity in relation to specific biotransformations. The remainder of the volume is then divided into sections based on chemical structure type, viz. aromatic hydrocarbons; alkenes and alkanes and their halogen-substituted derivatives; acyclic functional compounds; substituted aromatic compounds; miscellaneous alicyclics, aromatics and macrocycles; heterocycles; functional nitrogen compounds; nitrosamines; amino-acids and peptides; steroids; miscellaneous compounds.

Within each of these main sections, a one- to two-page abstract gives, for each chosen chemical, basic information including key functional group classification, test system and analytical methods used and an illustration of the metabolic pathway(s) observed, with one or more key literature sources of the information.

Volume 7 contains entries for some 250 chemicals of which about 10% are agrochemicals. The book is well presented and interesting in itself but will probably be of greatest value to those interested in metabolic pathways in general, who already have volumes 1–6 and may be thinking of setting up the CD-ROM, which will cross-refer to these volumes. Continuing with volume 7, the stated aim of the series is being well achieved in offering rapid access to recent metabolism studies.

G. T. Brooks